

ABSTRACT

An automatic pressure and temperature control apparatus and method for use in curing tire assemblies including retread tire assemblies is provided. Using water as a heating medium, a new process control method and apparatus is described that allows a more precise control of process variables during steady state conditions such that heat transfer is improved and the undesirable formation of steam is eliminated. Existing processes and equipment for curing tire assemblies can be modified, using the teaching disclosed herein, to implement and achieve the benefits of the present invention.